

# PRO Rental Product Range

## PRO30-1

(Fuel Optimised)

50/60 Hz Switchable Rating

Prime Product

30 kVA / 24 kW<sub>e</sub>



## KEY FEATURES

### Rental Ready Features

- 24 hour dual wall tankbase
- Forklift pockets
- Fully certified single point lifting eye
- Integrated heavy duty drag points with robust skid plate
- Coolant & oil drains piped to baseframe
- EMC certified
- Fully certified spark arresting silencer
- 50/60 Hz switchable frequency via terminal link
- Optimized cable entry for easy hook-up
- Sound isolated control panel with integrated power distribution access
- Robust hook-up point for lugged cable connection
- AC protected by limit switch on distribution door
- Emergency stop on control panel and enclosure
- Inboard mounted 3 way fuel valve connection for external fuel connection

### Engine

- Perkins four-stroke diesel engine
- Electronic governor, mechanical actuator
- EU IIIa emissions compliant

### Single-Source Supplier

- Factory designed and fully prototype tested with certified torsion vibration analysis available
- ISO 9001:2000 compliant facility

### PowerWizard Control Panel

- Fully featured power metering, protective relaying, and engine/generator control and monitoring
- Simple user friendly interface and navigation
- Automatic set-point adjustment integrated with voltage and frequency changes

### Alternator

- Leroy Somer Alternator
- Coastal insulation protection
- Self (SHUNT) excitation

### Integrated Voltage Regulator (IVR)

- Three-phase sensing
- Adjustable volts-per-hertz regulation
- Provides precise control, excellent block loading and constant voltage in the normal operating range

### Enclosure

- Galvanized sheet steel construction with two coat polyester powder-coated finish
- Six lockable (padlock / keylock) access doors for ease of maintenance
- Safety glass control panel viewing window with key lock
- Fuel fill and battery can only be reached through lockable access doors

### Reduced Environmental Impact

- Dual wall base tank with 110% spill containment
- CE labelling
- Bund Level alarm
- Exceptional noise performance Meets 87 dBA LWA 50 Hz (EU IIIa) Sound Power Limits (EU Machinery Directive)



# PRO Rental Product Range

## STANDARD EQUIPMENT

### Air Inlet

- Air cleaner with dust cup and service indicator

### Alternator

- LL1514F frame, three-phase, random wound, 12-lead design, self-excited, 2/3 pitch
- Coastal insulation protection

### Charging System

- Charging alternator; 12V, heavy duty with integral regulator and belt guards

### Control Panel

- PowerWizard 2.1+ genset mounted digital controller
- 50/60 Hz frequency switch via terminal link
- Panel mounted Emergency stop switch
- Automatic set-point adjustment integrated with voltage and frequency changes
- Integrated Voltage Regulator with EM10 Excitation Module
- Fully featured power metering, protective relaying and engine/generator control and monitoring

### Cooling System

- Package mounted radiator with high ambient capability
- Fully guarded pusher fan
- Coolant drain line with internal brass ball control valve piped to base-frame
- Low coolant level shutdown
- 50% coolant antifreeze with corrosion inhibitor

### Distribution System

- Robust steel enclosure, separate hinged, lockable door with rust resistant pinned hinges
- Main circuit breaker 4-pole, 63A with 12V DC shunt trip wired to distribution door safety switch
- Two wire remote start/stop terminals and 120-240 VAC auxiliary power connection for rapid starting
- Cable support

### Enclosure

- Sound attenuating, galvanized sheet metal enclosure with exceptional noise performance
- External emergency stop switch on enclosure
- Modular panel construction with a welded roof design
- Interior walls, ceilings and ducts insulated with precision cut noise insulating materials
- Sealed quarter turn compression door latches with key and padlock capabilities
- Front and rear access provided through hinged doors
- External single point lifting
- Enclosure is protected by powder coated white paint

### Engine

- Perkins 1103D heavy duty diesel engine
- Four-stroke diesel engine combines consistent performance and excellent fuel economy with minimum weight
- Electronic governed engine



# PRO Rental Product Range

---

## Exhaust System

- Integrated spark arresting silencer with flexible connectors, in separate compartment

## Fuel System

- 162L fuel tank, internal fuel fill. 24 hour based on 75% prime rating
- Primary fuel filter (30 micron) with integral water separator
- Auxiliary connections for customer supplied fuel transfer with 3 way fuel transfer system, internally mounted within the bunded area
- Mechanical fuel gauge
- Electronic Fuel gauge with control panel display. Low level fuel warning & shutdown
- Bund level sensor. High level warning / shutdown

## Lube System

- On engine primary & secondary oil filters, filler and dipstick
- Open crankcase breather with fumes disposal container and drain point
- Oil drain piped to edge of baseframe with internally mounted ball valve
- 500 hour oil change intervals

## Mounting System

- Generator set soft mounted using captive vibration mounts
- Heavy duty steel base frame contains integral fuel tank (dual wall)
- Provides 110% spill containment of all engine fluids
- Forklift pockets and heavy duty drag points with skid plates

## Starting System

- Single electric starting motor, 12V
- 12V 950CCA maintenance free battery, with single pole battery isolator switch
- 120/240 Volt single phase jacket water heater with thermostat

## General

- Factory testing of standard generator set
- Full manufacturer's warranty, O&M manuals

## AVAILABLE OPTIONS

- CE socket box with integrated MCB and RCBO protection
- Clipsal socket box with integrated MCB and RCBO protection
- Anti-condensation heater 110 or 230 VAC
- Coolant heater 110 or 230 VAC
- 12V battery charger
- UL/CSA listed 120 V, 20 Amp battery charger, shock mounted and enclosed in dust proof housing
- Permanent Magnet Generator (PMG)
- Earth Leakage
- CE labelling
- Lube oil sump pump
- DeepSea 7320

# PRO Rental Product Range

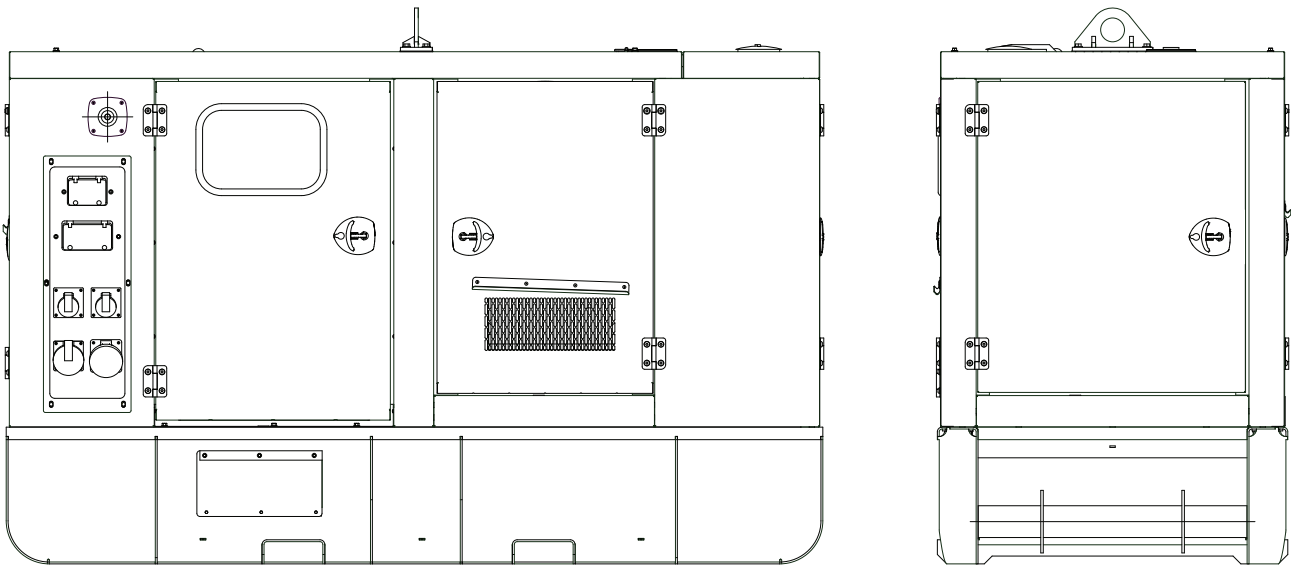
## Power Ratings

Frequency	Voltage	kVA	kW	Output Amps (A)	Breaker Rating (A)
50 Hz	415/240V	30	24	42	63
	400/230V	30	24	43	
	380/220V	30	24	46	
60 Hz	480/277V	35.8	28.6	43	63
	440/254V	35.8	28.6	47	
	380/220V	34.5	27.6	52	
	240/139V	35.8	28.6	86	
	220/127V	35.8	28.6	94	

Ratings at 0.8 power factor.

Prime Rating: These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and this model can supply 10% overload power for 1 hour in 12 hours.

Power available at variable load with a load factor not exceeding 80% of the prime power rating in a 24 hour period.



## Weights & Dimensions

Length - A (mm)	2150
Width - B (mm)	1120
Height - C (mm)	1583
Weight - Lube Oil & Coolant (kg)	1230
Weight - Lube Oil, Coolant & Fuel (kg)	1385

Sockets	15A	16A	32A	50A	63A	125A
Clipsal*	2x1ph+N+E	—	1x3ph+N+E	—	—	—
Sockets (CEE Form)*	—	2x1ph+N+E	1x3ph+N+E	—	—	—

\*Busbar connection is standard. Distribution sockets are optional.



# PRO Rental Product Range

## PRO30-1 Technical Data

### Generator Set Technical Data

	UNITS	50 Hz	60 Hz
Power rating	kVA (kW)	30 (24)	35.8 (28.6)
Oil pan capacity	L	7	7
Fuel consumption			
100% load	L/hr	7.2	8.6
75% load		5.6	6.6
50% load		4.1	4.9
Fuel tank capacity	L	162	162
Running time (75% load)	Hrs	26	22
Ambient capability	°C	55	50
Engine & radiator coolant capacity	L	10.2	10.2
Engine coolant capacity	L	4.4	4.4
Combustion airflow	m <sup>3</sup> /min		
Exhaust flow at rated – dry exhaust	m <sup>3</sup> /min	5.7	6.4
Exhaust temperature at rated kW	°C	500	520
Noise rating			
Sound power*		88	89
1m at 100% load	dB(A)	73	74
7m at 100% load		62	63
1m at 75% load		72	73
7m at 75% load		60	62

\*Guaranteed sound power as per 2000/14/EC



# PRO Rental Product Range

## Perkins 1103D Engine Data

Engine	Perkins 1103A-33TG1
Bore – mm (in)	105 mm
Stroke – mm (in)	127 mm
Displacement – L (cu in)	3.3 L
Compression ratio	19.25 : 1
Engine RPM	1500 / 1800
Aspiration	Naturally Aspirated (NA)
Aftercooler type	N/A
Turbocharger	N/A
Fuel system	Direct Injection, Rotary Pump
Governor type	Electronic Governor, Mechanical Actuator
Fuel	Class A2 Diesel or BS-EN590

## Alternator Data

Frame Size	LL1514F
Pitch	2/3
No of Poles	4
Excitation	Static regulated, brushless, self-excited
No of Bearings	Single bearing, close coupled
Insulation Class	H
Temperature rise	125/40°C
Enclosure IP Rating	IP23
Overspeed Capability (% of rated)	25%
Voltage regulator	3 phase sensing with adjustable Volts-per-Hz
Voltage regulation	Less than $\pm 0.5\%$
Telephone Harmonic Factor (THF)	Less than 2%
Harmonic Distortion (THD)	Less than 2%

\* Materials and specifications are subject to change without notice.

### FG Wilson manufactures product in the following locations:

Northern Ireland • Brazil • China • India

With headquarters in Northern Ireland, FG Wilson operates through a Global Dealer Network.

To contact your local Sales Office please visit the FG Wilson website at [www.FGWilson.com](http://www.FGWilson.com).

FG Wilson is a trading name of Caterpillar (NI) Limited.

In line with our policy of continuous product development, we reserve the right to change specification without notice.